RESPONSE UNDER 37 C.F.R. § 1.116

Appln. No.: 10/591,986

REMARKS

Attorney Docket No.: Q80545

Obviousness Rejection

On page 2 of the Office Action, claims 1-10 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue, et al. (WO 2004/067521 A1; priority date 2003 Jan 27; IDS 3/30/2007 reference) and Ogata et al. (US 4,780,465; 1988); in view of Niebergall ("Ionic Solutions and Electrolytic Equilibira); 2000; "Remington: The Science and Practice of Pharmacy"; 20th Ed.; Gennaro, Ed.; Lippincott Williams & Wilkins; Chapter 17, pp. 227-245).

In response, Applicants submit initially that Niebergall has been misapplied in the Office Action. As the Examiner indicated, Niebergall provides general chemical knowledge about salting out. However, the NaCl concentration used therein is quite high and, therefore, is not applicable as a reference in connection with providing an aqueous composition for pharmaceutical use such as for ocular topical administration.

The problem to be solved by the instant invention is to stabilize and to improve solubility of the compound specified in the claim in an isotonic aqueous composition. The inventors have found for the first time that the compound recited in Claim 1 (thiazole compound having the guanidyl group) salts out in a solution having an osmotic ratio to saline of about 1 (0.85% NaCl solution). That is, the inventors have identified this problem for the first time. As the Examiner indicated, the compound of the instant application is disclosed in Inoue; however, Inoue is silent about the above discussed problem of the compound having a guanidyl group.

As discussed on page 20, lines 5-17 in the present application, the aqueous composition of the present invention is used as a pharmaceutical composition. The composition to be administered topically to the eyes, for example, must be isotonic with the body fluid in the eye, and the osmotic ratio of the aqueous composition to saline (isotonic sodium chloride solution)

RESPONSE UNDER 37 C.F.R. § 1.116

Appln. No.: 10/591,986

Attorney Docket No.: Q80545

must be around 1. It is very important whether or not the ingredient salts out when it is put in a solution having the osmotic ratio to saline of around 1. The 0.85 % sodium chloride concentration gives the osmotic ratio to saline of 0.94 (calculated). In contrast, 0.5M NaCl solution equals to 2.92% (w/v) NaCl solution, and the calculated osmotic ratio to saline will be 3.24. Human beings cannot accept such hypertonic solution as that disclosed in Niebergall as an ophthalmic solution, injectable solution and the like. The art knows that there is no need to be concerned about salting out due to such a high concentration of NaCl for preparing pharmaceutical compositions. Accordingly, Niebergall is not relevant prior art.

With respect to Ogata, this reference discloses aqueous compositions that contain quinolone carboxylic acid. The compound disclosed in Ogata does not have guanidyl group. Since Inoue gives no suggestion about the problem to be solved by the instant invention, the art will not come up with the necessity of adjusting the osmotic pressure of the composition without using NaCl.

Thus, Applicants submit that the present invention is not obvious over the cited art, and withdrawal of this rejection is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

3

RESPONSE UNDER 37 C.F.R. § 1.116

Appln. No.: 10/591,986

Attorney Docket No.: Q80545

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 33,725

Bruce E. Kramer

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: December 6, 2010